

RE: JEM based on Arithmetic Mean

Brattin, Bill to: Bateson.Thomas.Benson.Bob

09/13/2012 08:14 AM

From: "Brattin, Bill" <brattin@srcinc.com>

To:

Cc: DeVoney.Danielle@epamail.epa.gov, Berry.David@epamail.epa.gov, "HILBERTJ@UCMAIL.UC.EDU" <HILBERTJ@UCMAIL.UC.EDU>, Christensen.Krista@epamail.epa.gov, Kopylev.Leonid@epamail.epa.gov

There were a few remaining items from our meeting on August 8 that I wanted to make sure were resolved.

1) There were questions about the sample values of 0.001. Danielle had thought these were possibly too low as the method of the day had a practical limit of about 0.05 f/cc. At our meeting, Bill had said that he agreed that values of 0.001 with short sampling duration were suspect and he was going to look at the sample durations or try to get the air volumes (or pump rates, sample sheets, etc) from Eric. Did that happen and I missed it?

See e-mail and attached spreadsheet from Brattin ion 8/8

2) Sampling duration weighting. Danielle had raised this originally and it sounded reasonable to me but at the Aug 8 meeting Bill argued against and it sounded like Danielle conceded the point. Can someone re-articulate the case against weighting averages by sampling duration so we have it written down?
Calculation of a sample duration-weighted average is appropriate only if exposure duration and sampling duration are directly proportional. However, there is no reason to expect that to be true. Rather, it is more likely that sampling duration is either random (based on time available to the sampler), or it is inversely related to the level of dust in the air.

3) I had asked to see the LOESS curves plotted on the same graphs as the exponential plots. Is that coming? It might help with the option.

As implemented, the LOESS fitting in SAS did not generate a data file with the numeric values of the LOESS fit (only the graphs sent previously). Linda Levin at UC will seek to create such a data file that can be used to create an overlay plot, but it will not be available for review today. Sorry about that.

Bill Brattin
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From: Thomas Bateson [mailto:Bateson.Thomas@epamail.epa.gov]

Sent: Wednesday, September 12, 2012 2:52 PM

To: Bob Benson

Cc: Brattin, Bill; Danielle DeVoney; David Berry; HILBERTJ@UCMAIL.UC.EDU; Krista Christensen; Leonid

Kopylev

Subject: Re: JEM based on Arithmetic Mean

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Thanks,
Tom

▼ Bob Benson---09/11/2012 03:43:53 PM---Attached are files summarizing the work on deriving the JEM based on the arithmetic mean from the IH

From: Bob Benson/R8/USEPA/US
To: Thomas Bateson/DC/USEPA/US@EPA, Leonid Kopylev/DC/USEPA/US@EPA, Krista Christensen/DC/USEPA/US@EPA, Danielle DeVoney/DC/USEPA/US@EPA, HILBERT.J@UCMAIL.UC.EDU, David Berry/R8/USEPA/US@EPA, brattin@srcinc.com
Date: 09/11/2012 03:43 PM
Subject: JEM based on Arithmetic Mean

Attached are files summarizing the work on deriving the JEM based on the arithmetic mean from the IH data from the Marysville plant. We need a review of the approach before we proceed with the rest of the calculations.

Please let me know when you are available for a conference call to discuss. We would like to do Thursday, Sept 13 (if possible) or Tuesday, Sept 18.

[attachment "Fitting Options v2a.docx" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 4.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 3.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 2.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 1.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 7.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 6.pdf" deleted by Thomas Bateson/DC/USEPA/US] [attachment "Figure 5.pdf" deleted by Thomas Bateson/DC/USEPA/US]